

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously Presented) A process for the oligomerization of olefins, which process comprises the steps of contacting an olefinic feedstock containing a mixed olefin feed having 4 and 5 carbon atoms under oligomerization conditions with a selectivated crystalline molecular sieve oligomerization catalyst and recovering an olefinic oligomeric product, of which at least a dimeric component has an average degree of branching of at most 2.0 and a Type V double bond content of at most 10%, and wherein the proportion of dimer product that is linear or has single methyl group branching is from 62 to 83%.
2. (Cancelled)
3. (Previously Presented) A process as claimed in claim 1, wherein the average degree of branching is within the range of from 0.5 to 2.0.
4. (Original) A process as claimed in claim 3, wherein the average degree of branching is within the range of from 0.8 to 2.0.
5. (Previously Presented) A process as claimed in claim 1, wherein the feedstock also contains propene.
- 6-11. (Cancelled)
12. (Previously Presented) A process as claimed in claim 1, wherein oligomerization is carried out at a temperature within the range of from 160°C to 250°C.
13. (Previously Presented) A process as claimed in claim 1, wherein oligomerization is carried out at a weight hourly space velocity within the range of from 0.1 to 4.0.

14. (Previously Presented) A process as claimed claim 1, wherein oligomerization is carried out at a conversion rate per pass of at most 65%.
15. (Previously Presented) A process as claimed in claim 1, wherein oligomerization is carried out at a pressure within the range of from 3.4 MPa to 10.5 MPa.
16. (Previously Presented) A process as claimed in claim 1, wherein the catalyst is selectivated ZSM-22 or selectivated ZSM-23.
17. (Original) A process as claimed in claim 16, wherein from 10 to 50% of acid sites are selectivated
18. (Previously Presented) A process as claimed in claim 16, wherein selectivation has been carried out using 2,4,6-trimethylpyridine.
19. (Previously Presented) A process as claimed in claim 1, which also comprises the step of recovering a dimer fraction from the oligomer product.
20. (Previously Presented) A process as claimed in claim 1, which also comprises the step of recovering a trimer fraction from the oligomer product.
21. (Previously Presented) A process as claimed in claim 1, which also comprises the step of recovering an oligomer product containing at least 10 carbon atoms.
22. (Previously Presented) A process as claimed in claim 1, which also comprises the step of oxonating the oligomer product and recovering a resulting aldehyde product.
23. (Original) A process as claimed in claim 22, which also comprises the step of hydrogenating the aldehyde product and recovering a resulting alcohol product.
24. (Original) A process as claimed in claim 23, which also comprises the step of esterifying the alcohol product.
25. (Cancelled)
26. (Original) A process as claimed in claim 22, which also comprises the step of oxidizing the aldehyde product and recovering a resulting acid product.

27. (Original) A process as claimed in claim 26, which also comprises the step of esterifying the acid product.
28. (Previously Presented) A plasticizer composition comprising the product of the process of claim 24.
- 29-30. (Cancelled)
31. (Previously Presented) A synthetic lubricant or lubricant component comprising the product of the process of claim 24.
32. (Previously Presented) A synthetic detergent or detergent component comprising the product of the process of claim 24.
- 33-35. (Cancelled)
36. (Previously Presented) The product of the process of claim 1.
37. (Original) A process for the manufacture of an alkylarene, which comprises reacting the product of claim 36 with an arene and recovering the alkylarene.
38. (Original) A process for the manufacture of an alkylarene, which comprises recovering from the product of claim 36 a C₁₀₊ fraction, reacting the said fraction with an arene, and recovering the alkylarene.
39. (Cancelled)
40. (Previously Presented) A synthetic lubricant or lubricant component comprising the product of the process of claim 27.
41. (Previously Presented) A synthetic detergent or detergent component comprising the product of the process of claim 27.
42. (Previously Presented) An ester or ester mixture comprising the product of the process of claim 27.
- 43-46. (Cancelled)